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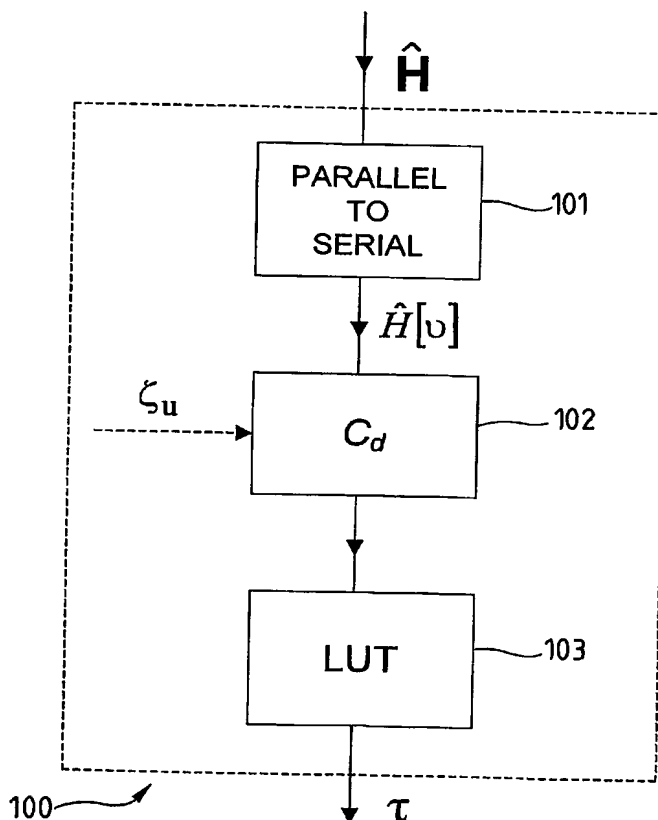
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(54) Title: CORRELATION METHOD FOR CHANNEL ESTIMATION FOR OFDM



(57) Abstract: The present invention concerns a method for estimating the time-dispersion of a channel comprising D subchannels, wherein one computes from a received signal a set of estimated Channel Transfer Factors (CTF's) $\hat{H}[v]$, where v ($0 \leq v < D$) is the subchannel number, said method comprising a step of calculating, for a predetermined strictly positive integer d , a correlation factor C_d representing the correlations, both in amplitude and in phase, between pairs $\hat{H}[v]$ and $\hat{H}[v + d]$ of said computed CTF estimates. By an appropriate choice of d , the time-dispersion resolution can be adapted to most prevalent channels. The correlation is optionally corrected according to the mean channel estimation signal-to-noise ratio. This method can be useful for many applications where knowing the time-dispersion characteristics of a channel is required, and is, for example, particularly suitable for designing a channel estimation filter, and for link adaptation. Application to devices and apparatus implementing these methods.



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